A facile environment-friendly one-pot two-step regioselective synthetic strategy for 3,7-diarylpyrazolo[1,5-a]pyrimidines related to Zaleplon and 3,6-diarylpyrazolo[1,5-a]pyrimidine-7-amines assisted by KHSO$_4$ in aqueous media

Molecular Diversity

Asem Satyapati Devi, Shunan Kaping and Jai Narain Vishwakarma*

*Organic Research Lab., Department of Chemical Science, Assam Don Bosco University, Guwahati-781017, Assam, India, E-mail: jnvishwakarma@rediffmail.com

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Spectral data of 3,7-diaryl-pyrazolo[1,5-a]pyrimidines (5a-5o)

1. $^1$H NMR spectrum of compound 5a
2. $^{13}$C NMR spectrum of compound 5a
3. Mass spectrum of compound 5a
4. $^1$H NMR spectrum of compound 5b
5. $^{13}$C NMR spectrum of compound 5b
6. Mass spectrum of compound 5b
7. $^1$H NMR spectrum of 5c
8. $^{13}$C NMR spectrum of 5c
9. Mass spectrum of 5c
10. $^1$H NMR spectrum of 5d
11. $^{13}$C NMR spectrum of 5d
12. Mass spectrum of 5d
13. $^1$H NMR spectrum of 5e
14. $^{13}$C NMR spectrum of 5e
15. Mass spectrum of 5e
16. $^1$H NMR spectrum of 5g
17. $^{13}$C NMR spectrum of 5g
18. Mass spectrum of 5g

Scan AP+ 3.43e6

%
19. $^1$H NMR spectrum of 5h
20. $^{13}$C NMR spectrum of 5h
21. Mass spectrum of 5h
22. $^1$H NMR spectrum of 5i
23. $^{13}$C NMR spectrum of 5i
24. $^1$H NMR spectrum of compound 5j
25. Mass spectrum of compound 5j
26. $^1$H NMR spectrum of compound 5k
27. $^{13}$C NMR spectrum of compound 5k
28. Mass spectrum of compound 5k
29. $^1$H NMR spectrum of compound 5l
30. $^{13}$C NMR spectrum of compound 5l
31. Mass spectrum of compound 51
32. $^1$H NMR spectrum of compound 5m
33. $^{13}$C NMR spectrum of compound 5m
34. Mass spectrum of compound 5m
35. $^1$H NMR spectrum of compound 5n
36. $^{13}$C NMR spectrum of compound 5n
37. Mass spectrum of compound 5n
38. $^1$H NMR spectrum of compound 5o
39. $^{13}$C NMR spectrum of compound 5o
40. Mass spectrum of compound 5o
Spectral data of 3,6-diarylpyrazolo[1,5-a]pyrimidin-7-amine (7a-7h)

41. $^1$H NMR spectrum of compound 7a
42. $^{13}$C NMR spectrum of compound 7a
43. Mass spectrum of compound 7a
44. $^1$H NMR spectrum of compound 7b

45. Mass spectrum of compound 7b
46. $^1$H NMR spectrum of compound 7c
47. $^{13}$C NMR spectrum of compound 7c
48. Mass spectrum of compound 7c
49. $^1\text{H}$ NMR spectrum of compound 7d

50. Mass spectrum of compound 7d
51. $^1$H NMR spectrum of compound 7e

![NMR Spectrum]

52. Mass spectrum of compound 7e

![Mass Spectrum]
53. $^1$H NMR spectrum of compound 7f
54. Mass spectrum of compound 7f
55. $^1$H NMR spectrum of compound 7g

56. Mass spectrum of compound 7g
57. $^1$H NMR spectrum of compound 7h
58. $^{13}$C NMR spectrum of compound 7h
59. Mass spectrum of compound 7h
Spectral data of N'-(6-(4-methoxyphenyl)-3-phenylpyrazolo[1,5-a]pyrimidin-7-yl)-N,N-dimethylformimidamide (8)

60. $^1$H NMR of compound 8

![NMR spectrum of compound 8 with peaks at specific ppm values]
61. $^{13}$C NMR of compound 8

![C NMR spectrum of compound 8](image)

62. Mass spectrum of compound 8

![Mass spectrum of compound 8](image)